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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,221	11/02/2001	Masanori Mochizuki	4272	9694
21553	7590	08/12/2004	EXAMINER	
FASSE PATENT ATTORNEYS, P.A. P.O. BOX 726 HAMPDEN, ME 04444-0726			PRONE, JASON D	
			ART UNIT	PAPER NUMBER
			3724	

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/053,221	<b>Applicant(s)</b> MOCHIZUKI, MASANORI	
	<b>Examiner</b> Jason Prone	<b>Art Unit</b> 3724	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2004.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,9 and 20-26 is/are pending in the application.  
     4a) Of the above claim(s) 5 is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1,3,9 and 20-26 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 02 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☒ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 22, 23, 25, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Szenger.

Szenger discloses the same invention including a column that extends axial in a direction and that has an internal through hole extending in the axial direction (16), that the through hole has a polygonal-shaped cross section bounded by a plural flat inner walls and plural inner corner areas (Figs. 4 and 5), a ram that extends axially and is movably received in the through hole of the column (19), that the ram has an outer shape with a polygonal-shaped cross section bounded by plural flat outer walls and plural outer corner areas (Figs. 4 and 5), that the flat outer walls are respectively adjacent and parallel to the flat inner walls (Fig. 6), plural pairs of roller elements respectively including two of the roller elements that are rotatably mounted to the column and are arranged respectively on two adjacent ones of the flat inner walls adjacent to a respective one of the inner corner areas such that the rollers contact and movably support the ram on all of the flat outer walls adjacent to each other at the outer corner areas (20a and 20b, 20c and 20d, 21a and 21b, and 21c and 21d), that the polygonal-shaped cross section of the through hole corresponds to the polygonal-

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shaped cross section of the ram (Figs. 4 and 5), that a total number of flat inner walls/inner corner areas/external angles of the inner corner areas corresponds to a total number of flat outer walls/outer corner areas/internal angles of the outer corner areas (Figs. 4 and 5), that the respective rotation axes of the roller elements are all fixed at non-adjustable positions relative to the column (20a-d and 21a-d), and at least three sets of the pairs of the roller elements arranged spaced from one another in the axial direction along the flat inner walls (20a-d and 21a-d).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, 9, 20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Szenger in view of Nagai et al. Szenger discloses the invention including a guide device (Figs. 4-6) for supporting a column (16) having a ram inserted (19) to allow relative axial movement between the column and the ram (Figs. 4-6), that the ram has an outer surface of a polygonal-shaped cross section (19), the outer surface has a plurality of ram flat portions (Fig. 4), that each of the ram flat portions extend along an axial direction of the ram (Figs. 4 and 5), that the column is disposed around the outer surface of the ram (16), that the column has a through hole of a polygonal-shaped cross section including plural corner areas (16), that the through hole is formed of a plurality of column flat portions meeting one another at the plural corner

areas (16), that each of the column flat portions corresponds to each of the ram flat portions (Figs. 4 and 5), a plurality of roller-shaped rolling elements being provided at each of the column flat portions (20a-d and 21a-d), that the rolling elements roll on the corresponding ram flat portion (Fig. 6), a respective pair of the rolling elements being disposed at adjacent ones of the column flat portions adjacent to every one of the plural corner areas (20a and 20b, 20c and 20d, 21a and 21b, and 21c and 21d), a plurality of supporting shafts being provided in the column (20a-d and 21a-d), that each of the supporting shafts extend respectively in a direction parallel to a line perpendicular to the axial direction of the ram (Figs. 4 and 5), that each of the supporting shafts rotatably support each rolling element (20a-d and 21a-d), that each of the supporting shaft is supported on two opposite end portions inside the column (Figs. 4 and 5), that each of the corner areas is a beveled corner including a beveled surface (Fig. 4), and at least three sets of the pairs of the rolling elements arranged spaced from one another in the axial direction (20a-d and 21a-d) but fails to disclose that each of the column flat portions have a longitudinal groove extending parallel to the axial direction and penetrating through the column, that the rollers are received in the grooves, and that the longitudinal grooves have an oil retaining member inserted therein. Nagai et al. teaches each of the column flat portions have a longitudinal groove extending parallel to the axial direction and penetrating through the column (40, 42, and 44), that the rollers are received in the grooves (46a-e), and that the longitudinal grooves have an oil retaining member inserted therein (Column 4 lines 18-27). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided

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Szenger with longitudinal grooves for supporting rollers and an oil retaining member, as taught by Nagai et al., to allow for easier removal of worn rollers and un-lubricated oil retaining member.

5. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Szenger in view of Nagai et al. Szenger discloses the invention but fails to disclose that each of the column flat portions have a longitudinal groove extending parallel to the axial direction and penetrating through the column and that the rollers elements are received in the grooves. See paragraph 4 above.

#### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1, 3, and 9 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is 703-605-4287. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 703-308-1082. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JP  
August 05, 2004



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